

Notice of Allowability	Application No.	Applicant(s)	
	09/837,733	PEPPER ET AL.	
	Examiner	Art Unit	
	Bernard E Souw	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 10/01/2004.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☒ The drawings filed on 15 May 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 01, 2004 has been entered.

Applicant's Amendment

2. The Amendment filed 10/01/2004 has been entered in reply to the final office action of March 26, 2004. The present Office Action is made with all the arguments being fully considered.

The claims have been amended.

No claim has been cancelled.

Claims 1-30 remain pending in this office action.

ALLOWANCE

3. Claims 1-30 are allowed.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

A system or method for focusing electromagnetic energy on a target comprising a first means for analyzing information contained in a received electromagnetic field originating from a reflection of a beacon or pilot signal at the target to determine specific and characteristic information about target, the received electromagnetic signal being distorted by the atmosphere, and a second means for providing a modulated output beam back to the target, the modulated return-beam having been changed in one or more characteristics while being also pre-distorted to compensate for the atmospheric distortions, phase noise and amplitude noise incurred to the received signal, as recited in claims 1, 19 and 30, is neither anticipated nor rendered obvious by any prior art.

Claims 2-18 and 20-29 are also allowed because of their dependencies, either directly or indirectly, upon claim 1 or claim 19.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Relevant Prior Arts

6. These prior arts made of record and not relied upon are considered pertinent to applicant's disclosure: (a) USPAT # 6,674,520, issued on 01/06/2001 to Hicks et al. and (b) USPAT # 6,738,012, issued on 05/18/2004 to Kirkpatrick, are found to claim subject matter(s) similar to the present disclosure, i.e., a countermeasure against an upcoming airborne threat, however, without using a beacon or pilot light and without generating a countermeasure radiation based on the signal reflected from the target, and without the use of adaptive optics to compensate for atmospheric distortion.

Further pertinent prior arts of record but not relied upon are (c) USPGPUB # 2003/0062468 and (d) USPGPUB # 2003/0062464, both issued on 04/03/2003 to Byren et al., claiming a countermeasure based on a target return signal from a beacon/pilot beam while aiming at destroying the target by high energy laser beam that is compensated for atmospheric distortions, which is here equivalent to the output beam of the present disclosure, however, without a means for, or step of, analyzing the target return signal to determine the nature and characteristics of the target, as claimed in the present invention.

Another pertinent prior art reference is an article appearing in Aerotech News and Review, 11/21/2001, titled "BAE Systems Tactical IR Countermeasure passes major milestone", http://www.aerotechnews.com/starc/2001/112101/BAE_systems.html, reporting a similar countermeasure system recently manufactured and successfully tested by the BAE Systems. However, similar to (a) and (b), neither target return from a beacon/pilot beam nor compensation for atmospheric distortion is included in the report.

Art Unit: 2881


Communications

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571 272 2477. The central fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes
October 22, 2004


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800